



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/757,326	01/09/2001	Sunderarajan G. Karaikurichi	31008.P031	5497

26181 7590 05/04/2005  
FISH & RICHARDSON P.C.  
PO BOX 1022  
MINNEAPOLIS, MN 55440-1022

EXAMINER

KASENGE, CHARLES R

ART UNIT PAPER NUMBER

2125

DATE MAILED: 05/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/757,326

Applicant(s)

KARAIKURICHI, SUNDERARAJAN  
G.

Examiner

Charles R. Kasenge

Art Unit

2125

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on 03 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-9, 11-13, 15, 17, 19, 21 and 22 is/are rejected.
- 7) ☒ Claim(s) 4, 10, 14, 16, 18 and 20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 January 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments, see Remarks, filed 2/3/05, with respect to the rejection(s) of the claims have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Kleyman U.S. Patent Application 2003/0156127.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-3, 5-9, 11-13, 15, 17, and 19 are rejected under 35 U.S.C. 102(e) as being anticipated by Kleyman U.S. Patent Application 2003/0156127. Referring to claims 1, 7, 11, 15, 17, and 19, Kleyman discloses a computer implemented method comprising: first translating a first representations of parts or sub-assemblies of an mechanical design assembly into a second, different representations of the parts or sub-assemblies of the mechanical design assembly (pg. 1, paragraph 12) and thereafter, translating one or more assembly constraints of the mechanical design assembly, where each assembly constraint defines an association between two or more parts or sub-assemblies of the mechanical design assembly and where translating assembly constraints includes converting a data format of the assembly constraints from a first format of a

Art Unit: 2125

first design system to a second, different format of a second, different design system (pgs. 1 and 4, paragraphs 12 and 44).

Referring to claims 2, 3, 8, 9, 12, and 13, Kleyman discloses the method of claim 1, wherein translating a first representation of parts or sub-assemblies into a second representation comprises tracking correspondence between the first and second representations during the translation (pg. 1, paragraph 12). Kleyman discloses the method of claim 1, wherein said translating of one or more assembly constraints comprises identifying geometric entities within said translated representations that are counterpart to geometric entities of said pre-translation representations constrained by said one or more assembly constraints and correspondingly constraining said counterpart geometric entities within said translated representations (pg. 1, paragraph 12).

Referring to claims 5 and 6, Kleyman discloses the method of claim 1, wherein said one or more assembly constraints comprise a selected one of a mating constraint and a flush constraint constraining on at least a first and a second sub-assembly or part of said mechanical design assembly (pg. 3, paragraph 37). Kleyman discloses the method of claim 1, wherein said one or more assembly constraints comprise a selected one of an angle constraint and a rotational constraint constraining on at least a first and a second sub-assembly/pad of said first plurality of sub-assemblies/pads (pg. 3, paragraph 37). The Office interprets the boundary constraints as “mating” constraints.

Referring to claims 21 and 22, Kleyman discloses the method of claim 1, wherein: translating a first representation of parts or sub-assemblies into a second representation includes changing a modeling approach from a first modeling approach used to generate the first

Art Unit: 2125

representation to as second modeling approach used to generate the second representation (pg. 1, paragraph 12).

#### *Allowable Subject Matter*

4. Claims 4, 10, 14, 16, 18, and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles R. Kasenge whose telephone number is 571 272-3743. The examiner can normally be reached on Monday through Friday, 8:30 - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard can be reached on 571 272-3749. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number: 09/757,326

Page 5

Art Unit: 2125

CK

April 25, 2005

Jayprakash N. Gandhi  
Primary Examiner 2125  
Technology Center 2000

JN Gandhi